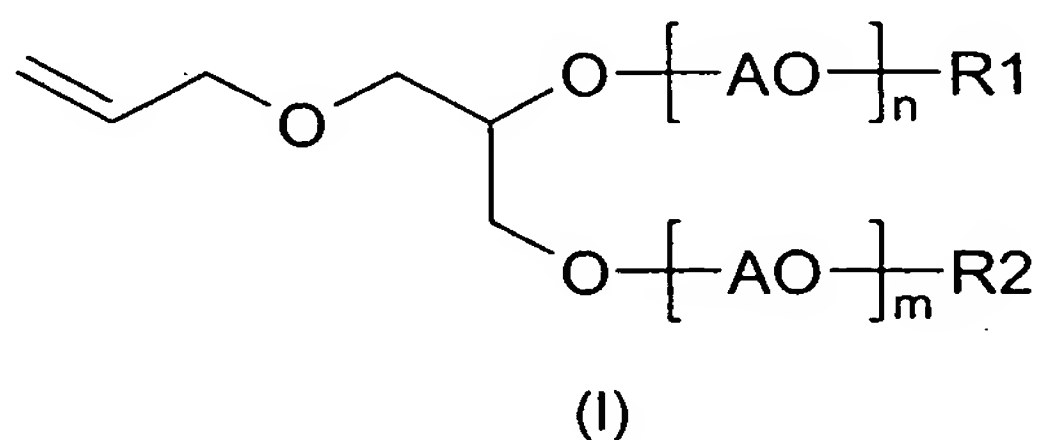


## Claims

1. The use of a water-soluble or water-dispersible polymer, obtainable by polymerizing
- 5
- a) at least one alkoxyated derivative of 3-allyloxy-1,2-propanediol (monomer A) and
- b) at least one ethylenically unsaturated mono- or dicarboxylic acid or the anhydrides, esters or mixtures thereof (monomer B) and
- 10 c) if appropriate, one or more further ethylenically unsaturated monomers C,
- as an additive in mineral building materials.
2. The use of a polymer according to claim 1, wherein at least one compound of the formula I
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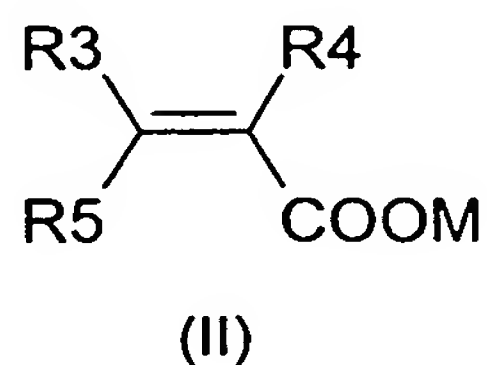


where

- 20 AO is C<sub>1</sub>-C<sub>12</sub>-alkylene oxide, styrene oxide or a mixture of two or more types thereof, it being possible for the two or more types to be linked either in random or in block form,
- n and m, independently of one another, are each an integer from 1 to 300 and
- 25 R<sub>1</sub> and R<sub>2</sub>, independently of one another, are each hydrogen, C<sub>1</sub>-C<sub>30</sub>-alkyl, C<sub>5</sub>-C<sub>8</sub>-cycloalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>1</sub>-C<sub>30</sub>-alkanoyl, C<sub>7</sub>-C<sub>21</sub>-aroyl, sulfuric (mono)ester or phosphoric ester,

is used as monomer A.

- 30 3. The use of a polymer according to claim 1 or 2, wherein at least one compound of the formula II



where

R3 and R4, independently of one another, may in each case be identical or different and are hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

R5 is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or a COOM group and

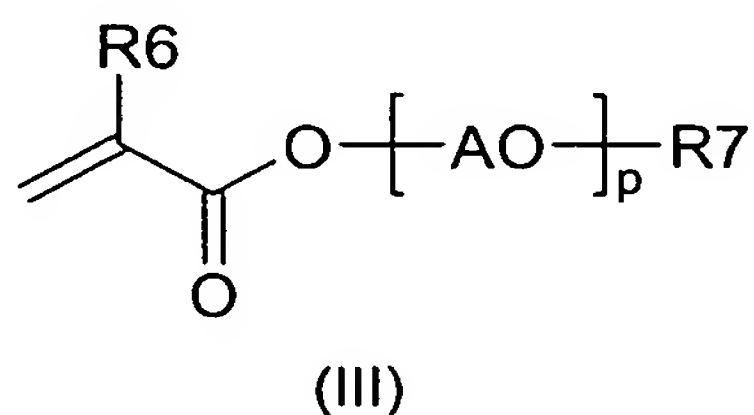
5 M is hydrogen, a monovalent or divalent metal ion, ammonium or an organic ammonium compound,

is used as monomer B.

10 4. The use of a polymer according to any of claims 1 to 3, wherein the weight average molecular weight M<sub>w</sub> of the polymer is from 1 000 to 100 000.

5. The use of a polymer according to any of claims 1 to 4, wherein an ester of the formula III of (meth)acrylic acid with a polyalkylene oxide

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where

20 R6 is hydrogen or a methyl radical,

AO is C<sub>1</sub>-C<sub>12</sub>-alkylene oxide, styrene oxide or a mixture of two or more types thereof, it being possible for the two or more types to be linked either in random or in block form,

25 R7 is hydrogen, C<sub>1</sub>-C<sub>30</sub>-alkyl, C<sub>5</sub>-C<sub>8</sub>-cycloalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>1</sub>-C<sub>30</sub>-alkanoyl or C<sub>7</sub>-C<sub>21</sub>-aroyl and

p is an integer from 1 to 300,

is used as monomer C.

30 6. The use of a polymer according to any of claims 1 to 5 as a cement dispersant.

7. The use of a polymer according to any of claims 1 to 6 as a gypsum dispersant.

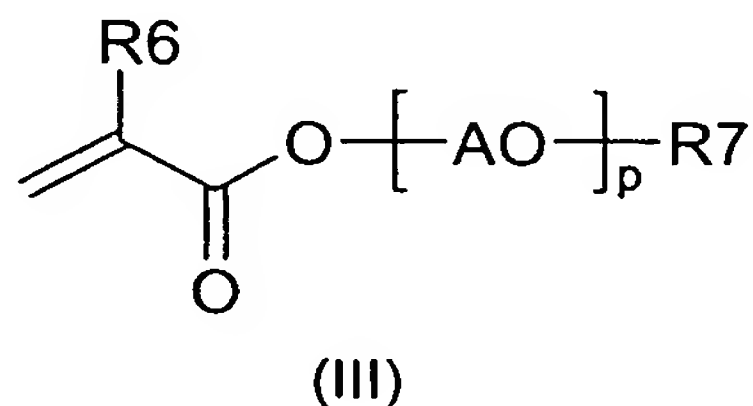
8. A polymer obtainable by polymerizing

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a) at least one alkoxyated derivative of 3-allyloxy-1,2-propanediol (monomer A) and

- b) at least one ethylenically unsaturated mono- or dicarboxylic acid or the anhydrides, esters or mixtures thereof (monomer B) and  
 c) if appropriate, one or more further ethylenically unsaturated monomers C.

- 5 9. The polymer according to claim 8, wherein at least one monomer C selected from the esters of (meth)acrylic acid with a polyalkylene oxide of the formula III



10 where

R6 is hydrogen or a methyl radical,

AO is C<sub>1</sub>-C<sub>12</sub>-alkylene oxide, styrene oxide or a mixture of two or more types thereof, it being possible for the two or more types to be linked either in random or in block form,

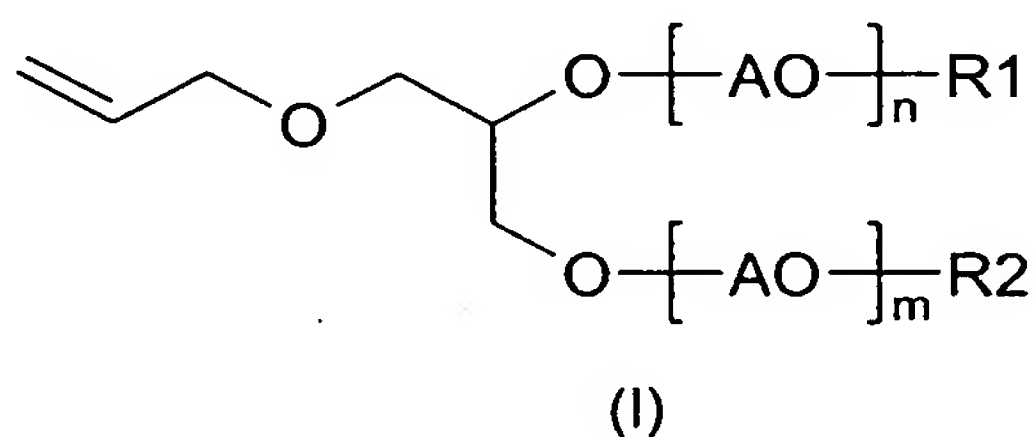
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R7 is hydrogen, C<sub>1</sub>-C<sub>30</sub>-alkyl, C<sub>5</sub>-C<sub>8</sub>-cycloalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>1</sub>-C<sub>30</sub>-alkanoyl or C<sub>7</sub>-C<sub>21</sub>-aroyl and

p is an integer from 1 to 300,

20 is used.

10. The polymer according to claim 8 or 9, wherein at least one compound of the formula I



25

where

AO is C<sub>1</sub>-C<sub>12</sub>-alkylene oxide, styrene oxide or a mixture of two or more types thereof, it being possible for the two or more types to be linked either in random or in block form,

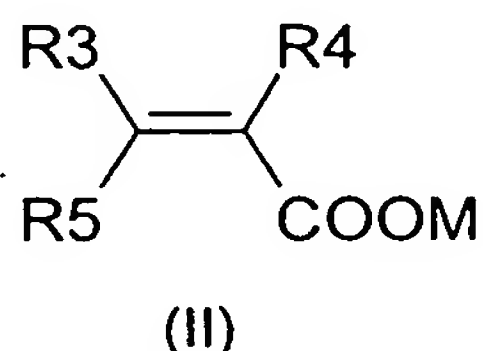
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n and m, independently of one another, are each an integer from 1 to 300 and

R1 and R2, independently of one another, are each hydrogen, C<sub>1</sub>-C<sub>30</sub>-alkyl, C<sub>5</sub>-C<sub>8</sub>-cycloalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>1</sub>-C<sub>30</sub>-alkanoyl, C<sub>7</sub>-C<sub>21</sub>-aroyl, sulfuric (mono)ester or phosphoric ester,

5 is used as monomer A.

11. The polymer according to any of claims 8 to 10, wherein at least one compound of the formula II



10

where

R3 and R4, independently of one another, may in each case be identical or different and are hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

15

R5 is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or a COOM group and

M is hydrogen, a monovalent or divalent metal ion, ammonium or an organic ammonium compound,

is used as monomer B.

20

12. A cement dispersant comprising at least one polymer according to any of claims 8 to 11.

13. A gypsum dispersant comprising at least one polymer according to any of claims 8 to 12.

25

14. A mineral building material comprising cement, water and at least one polymer according to any of claims 8 to 11 and further conventional aggregates.

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15. A mineral building material comprising gypsum, water and at least one polymer according to any of claims 8 to 11 and further conventional aggregates.